

Should there be any charge herein, please charge
Deposit Account 09-0447.

I. Real Party in Interest

The real party in interest is International Business
Machines Corporation, the assignee of the present
Application.

II. Related Appeals and Interferences

None.

III. Status of Claims

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

There are 32 claims in this Application.

B. STATUS OF ALL THE CLAIMS

1. Claims cancelled: 15-21, and 28-30.
2. Claims withdrawn from consideration but not
cancelled: None.
3. Claims pending: 1-14, 22-27, and 31-41.
4. Claims allowed: None.
5. Claims rejected: 1-14, 22-27, and 31-41.

C. CLAIMS ON APPEAL

Claims on appeal: 1-14, 22-27, and 31-41.

IV Status of Amendments

An Amendment after Final Rejection has been filed. As of this date, the Amendment has been received by the U. S. Patent Office but it is not clear whether it has been entered. The Amendment, in response to a Rejection under 35 U.S.C 112, second paragraph, corrects informalities in 32-41 in order to place the Application in better form for Appeal.

The list of claims in VIII. Appendix includes the changes in claims 32-41. Should Examiner refuse to enter the amendments, Applicant upon being so advised, will substitute a new set of claims 32-41.

V. Summary of Claimed Subject Matter

Claim 1 is annotated with respect to the Specification and Drawings as follows.

1. A computer controlled display system (Fig. 3, described on Page 9, lines 3-18) for tracking the development of software products having a plurality of developmental lines (Fig. 3 "lines 51", described from page 9, line 32 to page 10, line 5) comprising:

means for setting in each of said plurality of developmental lines, a sequence of checkpoints (checkpoints: 1-5; 1A-3A; 6A-6C; 7A; 7-12; and 21-24, Fig. 3, described page 10, lines 10-13; the computer hardware for supporting this function is described page 6, line 29 through page 7 line 3, describing with respect to Fig. 1, that all of the tracking and setting of checkpoints is carried out, together with other functions on a plurality of computer controlled display stations, each associated with one of the developmental lines; should further details with respect to display stations be needed, reference may be made to Fig. 2 described on page 7, lines 13-20);

means for tracking each of said developmental lines to determine the reached checkpoints (checkpoints 1, 2A, 7A, 7-9, 21 and 22, Fig. 4, described on page 10, lines 14-18; the computer hardware for supporting this function is described page 6, line 29 through page 7 line 3, describing with respect to Fig. 1, that all of the tracking and setting of checkpoints is carried out, together with other functions on a plurality of computer controlled display stations, each associated with one of the developmental lines; should further details with respect to display stations be needed, reference may be made to Fig. 2 described on page 7, lines 13-20); and

means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints (page 10, lines 14-18 indicates the checkpoints reached in plurality of developmental lines 51, Fig. 4; the computer hardware for supporting this function is described page 6, line 29 through page 7 line 3, describing with respect to Fig. 1, that all of the tracking and setting of checkpoints is carried out, together with other functions on a plurality of computer controlled display stations, each associated with one of the developmental lines; should further details with respect to display stations be needed, reference may be made to Fig. 2 described on page 7, lines 13-20).

Claim 8 is annotated with respect to the Specification and Drawings as follows.

8. A method (Fig. 3, described on Page 9, lines 3-18) for tracking the development of software products having a plurality of developmental lines (Fig. 3 "lines 51", described from page 9, line 32 to page 10, line 5) on a computer controlled display comprising:

setting in each of said plurality of developmental lines, a sequence of checkpoints (checkpoints: 1-5; 1A-3A; 6A-6C; 7A; 7-12; and 21-24, Fig. 3, described page 10, lines 10-13);

tracking each of said developmental lines to determine the reached checkpoints (checkpoints 1, 2A, 7A, 7-9, 21 and 22, Fig. 4, described on page 10, lines 14-18); and

simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints (page 10, lines 14-18 indicates the checkpoints reached in plurality of developmental lines 51, Fig. 4).

Claim 22 is annotated with respect to the Specification and Drawings as follows.

22. A computer controlled display system (Fig. 3, described on Page 9, lines 3-18) for tracking the building of a program product from a functional implementation stage to a complete integrated program product comprising:

a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product (Fig. 3 "lines 51", described from page 9, line 32 to page 10, line 5);

means for setting in each of said plurality of developmental lines, a sequence of checkpoints (checkpoints: 1-5; 1A-3A; 6A-6C; 7A; 7-12; and 21-24, Fig. 3, described page 10, lines 10-13; the computer hardware for supporting this function is described page 6, line 29 thorough page 7 line 3, describing with respect to Fig. 1, that all of the tracking and setting of checkpoints is carried out, together with other functions on a plurality of computer controlled display stations, each associated with one of the developmental lines; should further details with respect to display stations be needed, reference may be made to Fig. 2 described on page 7, lines 13-20);

means for tracking each of said developmental lines to determine the reached checkpoints (checkpoints 1, 2A, 7A, 7-9, 21 and 22, Fig. 4, described on page 10, lines 14-18; the computer hardware for supporting this function is described page 6, line 29 thorough page 7 line 3, describing with respect to Fig. 1, that all of the tracking and setting of checkpoints is carried out, together with other functions on a plurality of computer controlled display stations, each associated with one of the developmental lines; should

further details with respect to display stations be needed, reference may be made to Fig. 2 described on page 7, lines 13-20); and

means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints (page 10, lines 14-18 indicates the checkpoints reached in plurality of developmental lines 51, Fig. 4; the computer hardware for supporting this function is described page 6, line 29 through page 7 line 3, describing with respect to Fig. 1, that all of the tracking and setting of checkpoints is carried out, together with other functions on a plurality of computer controlled display stations, each associated with one of the developmental lines; should further details with respect to display stations be needed, reference may be made to Fig. 2 described on page 7, lines 13-20).

Claim 25 is annotated with respect to the Specification and Drawings as follows.

25. A method for tracking, on a computer controlled display (Fig. 3, described on Page 9, lines 3-18), the building of a program product from a functional implementation stage to a complete integrated program product comprising:

 setting up a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product (Fig. 3 "lines 51", described from page 9, line 32 to page 10, line 5);

 setting up in each of said plurality of developmental lines, a sequence of checkpoints (checkpoints: 1-5; 1A-3A; 6A-6C; 7A; 7-12; and 21-24, Fig. 3, described page 10, lines 10-13);

 tracking each of said developmental lines to determine the reached checkpoints (checkpoints 1, 2A, 7A, 7-9, 21 and 22, Fig. 4, described on page 10, lines 14-18); and

 simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints (page 10, lines 14-18 indicates the checkpoints reached in plurality of developmental lines 51, Fig. 4).

Claim 31 is annotated with respect to the Specification and Drawings as follows.

31. A method for tracking the development of software products having a plurality of developmental lines on a computer controlled display (Fig. 3, described on Page 9, lines 3-18) comprising:

setting in each of said plurality of developmental lines, a sequence of checkpoints (checkpoints: 1-5; 1A-3A; 6A-6C; 7A; 7-12; and 21-24, Fig. 3, described page 10, lines 10-13);

tracking each of said developmental lines to determine the reached checkpoints (checkpoints 1, 2A, 7A, 7-9, 21 and 22, Fig. 4, described on page 10, lines 14-18);

modifying said developmental lines and said checkpoints including the switching of an action required at the checkpoint to a checkpoint in another developmental line (with respect to Fig. 5, page 10, lines 19-30 describe that in response to a failure condition, there is a switch to default path, item 58 on menu 57);

simultaneously displaying, remote from said tracking, said plurality of developmental lines indicating said reached checkpoints, and modifications to said developmental lines and said checkpoints (with respect to the display screens of Figs. 4 and 5, page 10 line 30 to page 11, line 14 describe that the conditions of the simultaneous lines is displayed to users remote from the lines, who have various levels of authorization to make modifications);

storing, in association with said displaying step, the data tracked in said tracking step (Fig. 1 shows monitoring display stations 13 connected to the data on the lines being monitor via networks, and the monitored data being stored in database storage 17 as described on page 7, lines 3-12); and

communicating the data tracked to said storing step (Fig. 1 shows monitoring display stations 13 connected to the data on the lines being monitor via networks, and the monitored data being stored in database storage 17 as described on page 7, lines 3-12).

Claim 32 is annotated with respect to the Specification and Drawings as follows.

32. A computer useable medium having stored thereon a computer readable program (page 7 line 32 to page 8, line 5, with reference to Fig. 2, describes the storage of the program 40 including the program of the present invention on a computer readable medium RAM 14) for tracking the development of software products having a plurality of developmental lines on a computer controlled display, wherein the computer readable program when executed on a computer (With respect to Fig. 9, page 11, lines 26-29 introduces the computer program which when executed, page 11, line 29 to page 12, line 13 performs the steps which follow) causes the computer to:

set in each of said plurality of developmental lines, a sequence of checkpoints (step 72, Fig. 9, described page 11, lines 32-33);

track each of said developmental lines to determine the reached checkpoints (step 73, Fig. 9, described page 12, lines 1-2); and

simultaneously display said plurality of developmental lines and indicating said reached checkpoints (step 74, Fig. 9, described page 12, lines 3-5).

Claim 39 is annotated with respect to the Specification and Drawings as follows.

39. A computer useable medium having stored thereon a computer readable program (page 7 line 32 to page 8, line 5, with reference to Fig. 2, describes the storage of the program 40 including the program of the present invention on a computer readable medium RAM 14) for tracking, on a computer controlled display, for the building of a program product from a functional implementation stage to a complete integrated program product, wherein the computer readable program when executed on a computer (With respect to Fig. 9, page 11, lines 26-29 introduces the computer program which when executed, page 11, line 29 to page 12, line 13 performs the steps which follow) causes the computer to:

set up a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product (step 71, Fig. 9, described page 11, lines 29-32);

set up in each of said plurality of developmental lines, a sequence of checkpoints (step 72, Fig. 9, described page 11, lines 32-33);

track each of said developmental lines to determine the reached checkpoints (step 73, Fig. 9, described page 12, lines 1-2); and

simultaneously display said plurality of developmental lines and indicate said reached checkpoints (step 74, Fig. 9, described page 12, lines 3-5).

Dependent Claim 7 (argued separately) is annotated as follows with respect to the Specification and Drawings.

7. The computer controlled display system of claim 2 wherein:

said means for tracking are remote from said means for displaying (with respect to the display screens of Figs. 4 and 5, page 10 line 30 to page 11, line 14 describe that the conditions of the simultaneous lines is displayed to users remote from the lines, who have various levels of authorization to make modifications; the computer hardware for supporting this function is described page 6, line 29 through page 7 line 7, describing with respect to Fig. 1, that display stations 13 may be used either to track or control the displayed development lines; it is noted that display stations 13 may be remote from each other),

and said system further includes:

means for storing, in association with said means for displaying, the data tracked by said means for tracking (Fig. 1 shows monitoring display stations 13 connected to the data on the lines being monitor via networks, and the monitored data being stored in database storage 17 as described on page 7, lines 3-12); and

means for communicating the data tracked to said means for storing (Fig. 1 shows monitoring display stations 13 connected to the data on the lines being monitor via networks, and the monitored data being stored in database storage 17 as described on page 7, lines 3-12).

Dependent Claim 14 (argued separately) is annotated as follows with respect to the Specification and Drawings.

14. The method for tracking of claim 9 wherein:

said step of tracking is carried out remote from said displaying step (with respect to the display screens of Figs. 4 and 5, page 10 line 30 to page 11, line 14 describe that the conditions of the simultaneous lines is displayed to users remote from the lines, who have various levels of authorization to make modifications),

and further including the steps of:

storing, in association with said displaying step, the data tracked in said tracking step (Fig. 1 shows monitoring display stations 13 connected to the data on the lines being monitor via networks, and the monitored data being stored in database storage 17 as described on page 7, lines 3-12); and

communicating the data tracked to said storing step (Fig. 1 shows monitoring display stations 13 connected to the data on the lines being monitor via networks, and the monitored data being stored in database storage 17 as described on page 7, lines 3-12).

Dependent Claim 38 (argued separately) is annotated as follows with respect to the Specification and Drawings.

38. The computer usable medium of claim 33 wherein the computer program when executed, causes the computer to:

track developmental lines remote from said display (with respect to the display screens of Figs. 4 and 5, page 10 line 30 to page 11, line 14 describe that the conditions of the simultaneous lines is displayed to users remote from the lines, who have various levels of authorization to make modifications);

store, tracked data, in association with said display (Fig. 1 shows monitoring display stations 13 connected to the data on the lines being monitor via networks, and the monitored data being stored in database storage 17 as described on page 7, lines 3-12); and

communicating the data tracked to be stored (Fig. 1 shows monitoring display stations 13 connected to the data on the lines being monitor via networks, and the monitored data being stored in database storage 17 as described on page 7, lines 3-12).

VI. Grounds of Rejection to be Reviewed on Appeal

A. Claims 1-6, 8-13, 22-27, 32-37, and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Microsoft Project publication (hereinafter called Project) in view of Song et al. (US5,849,999) (Song).

B. Claims 7, 14, 31, and 38 are rejected as obvious over Project, in view of Song, further in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a).

C. Claims 32-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which is regarded as the invention.

VII. Argument

A. The rejection of claims 1-6, 8-13, 22-27, 32-37, and 39-41 under 35 U.S.C. 103(a)

The rejection of claims 1-6, 8-13, 22-27, 32-37, and 39-41 under 35 U.S.C. 103(a) as being unpatentable over The Microsoft Project publication (hereinafter called Project) in view of Song et al. (US5,849,999) is respectfully traversed.

It is submitted that while Project and Song may disclose some of the elements of the present invention, they do not either individually or in combination disclose all of the elements of the present invention. Also, the Examiner has proposed a combination of such elements which is not suggested in either reference. The Examiner's proposed combination could only be made in the light of Applicants' own teaching. This is not an appropriate basis for an obviousness rejection under 35 U.S.C 103.

The present invention provides an implementation for simultaneously monitoring of the progress of product development distributed between a plurality of developmental lines in the development of complex computer software products so that the data relative to each line is readily available and communicated to the developers working on the other lines. Accordingly, the claims of the present invention cover the combination, in tracking the development of software products, of setting up and simultaneously displaying a sequence of checkpoints in each of a plurality of developmental lines, determining which checkpoints have been reached in each developmental line and then indicating the reached checkpoints on the simultaneously displayed developmental lines.

In considering the basic reference, the Project publication, it is an over 600 page text book. The Examiner

has cited sections from the large publication. The Project text does provide a user with software tools for the management of business or manufacturing projects including scheduling, assignment of tasks, allocating resources, and even bench marking which for the purpose of this discussion will be considered as check pointing. The Examiner has picked general elements from the Project text book and proposed combining such general elements, not based upon any suggestion the Project text, but based primarily on Applicants' own teaching. Admittedly, there are probably enough tools and routines disclosed in the cited over 600 page Project text through the use of which the system of the invention could be built. However, Applicants submit that the cited Project text does not provide one skilled in the art with the specific guidance necessary to combine the diverse tools and routines in Project to develop Applicants' claimed invention.

In this connection, please consider representative claim 1:

1. A computer controlled display system for tracking the development of software products having a plurality of developmental lines comprising:

means for setting in each of said plurality of developmental lines, a sequence of checkpoints;

means for tracking each of said developmental lines to determine the reached checkpoints; and

means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints.

Even if the teaching of the Project text is accorded the best interpretation as put forth by Examiner, this reference would still fail to disclose the underlined elements in claim 1 above related to the simultaneous

display of sequences of checkpoints in a plurality of developmental lines.

The Examiner admits this on page 6 of the Final Reaction but argues that the suggestion or motivation for simultaneously displayed lines may be found in Project, pp.125-126 and Fig. 5.1. It is submitted that what is shown here in Project is a planning tool in which tasks may be organized into a hierarchy or tree for planning purposes. If the Examiner is arguing that nodes at the same level of the tree are the equivalent of simultaneous development lines, it is submitted that the suggestion is too vague and unspecific to lead one skilled in the art to the setting up and simultaneously displaying a sequence of checkpoints in each of a plurality of developmental lines, determining which checkpoints have been reached in each developmental line and then indicating the reached checkpoints on the simultaneously displayed developmental lines.

Song does not make up for the deficiencies of the basic Project publication.

While Song is concerned with software development and may permit user access to what may be considered developmental lines, Song does not appear to be concerned with a collective or simultaneous display of a plurality of developmental lines each with indicated reached checkpoints.

Song is primarily concerned with software documentation i.e. that the documentation at each stage meets the development process requirements for that stage.

Song does not suggest setting in each of a plurality of developmental lines a sequence of checkpoints. The Examiner points to col 3, lines 57 and 58, and Fig. 3. This is a very vague citation. It deals with a procedure for producing

software documents for a software development and testing process. There is some very general statement about defining procedures and documents required during the project execution. It is submitted that such a vague and general statement does not suggest the claimed element: "setting in each of said plurality of developmental lines, a sequence of checkpoints"

The Examiner also cites Fig. 3 in Song for this teaching. Fig. 3 involves a very general description of a progress panel showing the status of documentation of the individual functions required to be documented at each of several stages in the development of a single component. Even if the listing of developmental lines in Fig. 3 of Song: System Function...Measurement, Imaging, Filming would be considered the equivalent of a plurality of developmental lines, there is no simultaneous display of these developmental lines. In Fig. 3 of Song there is only one development line displayed i.e. status of Measurement. Accordingly, it is submitted that even if the teaching of Project could be modified by the teaching of Song as suggested by Examiner, there still would be no teaching of "simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints".

It is submitted that in the reading of the Project and Song references with respect to the present invention, the Examiner has picked and chosen and combined elements from Project and Song not in the light of teachings from these references but in the light of Applicants' own teaching. Thus, it is submitted that Examiner's proposed combination of selected elements and omitted elements in Project and Song is being made not with the requisite foresight of one skilled in the art, but rather with the hindsight obtained

solely by the teaching of the present invention. This approach cannot be used to render Applicants' invention unpatentable.

"To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art references of record convey nor suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W. L. Gore, 721 F 2d at 1553, 220 USPQ, pp. 312-313.

"One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fine, 5 USPQ 2d 1596 (C.A.F.C.) 1988.

Dependent claims 6, 13, and 37 are submitted to be patentable over Song for all of the reasons set forth above for the patentability of the claims from which they depend. In addition, these claims set forth an implementation that when modifying the actions required of checkpoints, the modification may include switching of the actions to others of said plurality of developmental lines. For a teaching of this aspect of the claimed invention, Examiner cites pages 473 and 311-312 of Project. It is submitted that, at best, all these sections generally suggest is that particular individual developmental lines may be tracked, modified, and have resources allocated as needed. This disclosure of Project in the development of an individual component is not suggestive of switching actions from one development line to another in the simultaneous display of a plurality of developmental lines. The reason such switching in the present invention may be interactively easily done is that

all of the plurality of lines are simultaneously displayed.

In both Song and Project, each of the developmental components or lines is individually, not simultaneously displayed with a description devoid of any suggestion that attributes or actions may be switched to other undisplayed developmental lines.

B. The rejection of claims 7, 14, 31, and 38 as obvious over Song et al. in view of Hopwood et al. (US6,223,343) under 35 U.S.C. 103(a) is also respectfully traversed.

Claims 7, 14, 31, and 38 are submitted to be patentable over Project in view of Song for all of the reasons set forth above for the claims from which they depend. In addition, these claims set forth an implementation that the means for tracking are remote from the display on which the plurality of product lines are displayed and the tracking means communicate the tracked data to the display system where the tracked data is stored. Since Song does not disclose this, the Examiner goes to a combination with Hopwood. In the data tracking and management system of Hopwood, even if the data tracking could arguably be said to be remote from the display on which the data is shown, there appears to be no suggestion that the tracked data is stored in association with this display. In Hopwood, the data tracked remotely from the display appears to also be stored remotely from the display. Accordingly, it is submitted that Song even when combined with Hopwood still does not suggest the invention defined in claims 7, 14, 31, and 38.

C. Rejection of claims 32-41 under 35 U.S.C. 112, (2nd P.)

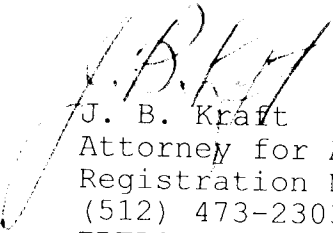
Applicants submit that their Amendment after Appeal referenced hereinabove has satisfied the objections which led to this rejection. Claims 32-41 have been amended to recite: "32. A computer useable medium having stored thereon a computer readable program for...., wherein the computer readable program when executed on a computer causes the computer to..." . The claims then go on to set forth the steps carried out by the stored program. This format is consistent with the Manual of Patent Examining Procedures (MPEP) format for program related claims. Support for this terminology may be found in the present Application at page 7 line 32 to page 8, line 5, with reference to Fig. 2, describes the storage of the program 40 including the program of the present invention on a computer readable medium RAM 14.

Examiner is respectfully requested to enter the Amendment after Final rejection which modifies claims 32-41 so as to narrow the issues on Appeal to issues of patentability over prior art, and to withdraw the rejection of claims 32-41 under 35 U.S.C. 112, second paragraph.

Conclusion

In view of the foregoing, claims 1-14, 22-27, and 31-41 are submitted to be patentable.

Accordingly, the Board of Appeals is respectfully requested to reverse the final rejection and find claims 1-14, 22-27, and 31-41 in condition for allowance.


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VIII. Claims Appendix

1. A computer controlled display system for tracking the development of software products having a plurality of developmental lines comprising:

means for setting in each of said plurality of developmental lines, a sequence of checkpoints;

means for tracking each of said developmental lines to determine the reached checkpoints; and

means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints.

2. The computer controlled display system of claim 1 further including:

means for modifying said developmental lines and said checkpoints; and

means for displaying said modifications.

3. The computer controlled display system of claim 2 further including means for displaying at each of said checkpoints, a set of developmental attributes for said checkpoint.

4. The computer controlled display system of claim 3 further including:

means for modifying said developmental attributes for each of said checkpoints; and

means for displaying said modifications at each of said checkpoints.

5. The computer controlled display system of claim 3 wherein said developmental attributes include actions performed in said software product development.

6. The computer controlled display system of claim 5 wherein said means for modifying said actions switch said actions to other of said developmental lines.

7. The computer controlled display system of claim 2 wherein:

said means for tracking are remote from said means for displaying,

and said system further includes:

means for storing, in association with said means for displaying, the data tracked by said means for tracking; and

means for communicating the data tracked to said means for storing.

8. A method for tracking the development of software products having a plurality of developmental lines on a computer controlled display comprising:

setting in each of said plurality of developmental lines, a sequence of checkpoints;

tracking each of said developmental lines to determine the reached checkpoints; and

simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints.

9. The method for tracking of claim 8 further including the steps of:

modifying said developmental lines and said checkpoints; and

displaying said modifications.

10. The method for tracking of claim 9 further including the step of displaying at each of said checkpoints, a set of developmental attributes for said checkpoint.

11. The method for tracking of claim 10 further including the steps of:

 modifying said developmental attributes of a plurality of said checkpoints; and

 displaying said modifications at each of said modified checkpoints.

12. The method for tracking of claim 10 wherein said developmental attributes include actions performed in said software product development.

13. The method for tracking of claim 12 wherein said step of modifying said actions switches said actions to other of said developmental lines.

14. The method for tracking of claim 9 wherein:

 said step of tracking is carried out remote from said displaying step,

 and further including the steps of:

 storing, in association with said displaying step, the data tracked in said tracking step; and

 communicating the data tracked to said storing step.

22. A computer controlled display system for tracking the building of a program product from a functional implementation stage to a complete integrated program product comprising:

a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product;

means for setting in each of said plurality of developmental lines, a sequence of checkpoints;

means for tracking each of said developmental lines to determine the reached checkpoints; and

means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints.

23. The computer controlled display system of claim 22 further including means for displaying at each of said checkpoints, a set of attributes for said checkpoint related to the compatibility functions of said checkpoint line.

24. The computer controlled display system of claim 23 further including:

means for modifying said attributes for each of said checkpoints; and

means for displaying said modifications at each of said checkpoints.

25. A method for tracking, on a computer controlled display, the building of a program product from a functional implementation stage to a complete integrated program product comprising:

 setting up a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product;

 setting up in each of said plurality of developmental lines, a sequence of checkpoints;

 tracking each of said developmental lines to determine the reached checkpoints; and

 simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints.

26. The method for tracking of claim 25 further including the step of displaying at each of said checkpoints, a set of attributes for said checkpoint related to the compatibility functions of said checkpoint line.

27. The method for tracking of claim 26 further including the steps of:

 modifying said attributes for each of said checkpoints; and

 displaying said modifications at each of said checkpoints.

31. A method for tracking the development of software products having a plurality of developmental lines on a computer controlled display comprising:

setting in each of said plurality of developmental lines, a sequence of checkpoints;

tracking each of said developmental lines to determine the reached checkpoints;

modifying said developmental lines and said checkpoints including the switching of an action required at the checkpoint to a checkpoint in another developmental line;

simultaneously displaying, remote from said tracking, said plurality of developmental lines indicating said reached checkpoints, and modifications to said developmental lines and said checkpoints;

storing, in association with said displaying step, the data tracked in said tracking step; and

communicating the data tracked to said storing step.

32. A computer useable medium having stored thereon a computer readable program for tracking the development of software products having a plurality of developmental lines on a computer controlled display, wherein the computer readable program when executed on a computer causes the computer to:

set in each of said plurality of developmental lines, a sequence of checkpoints;

track each of said developmental lines to determine the reached checkpoints; and

simultaneously display said plurality of developmental lines and indicating said reached checkpoints.

33. The computer usable medium of claim 32 wherein said computer program when executed further causes the computer to:

 modify said developmental lines and said checkpoints;
and
 displaying said modifications.

34. The computer usable medium of claim 33 wherein said computer program when executed further causes the computer to display, at each of said checkpoints, a set of developmental attributes for said checkpoint.

35. The computer usable medium of claim 34 wherein said computer program when executed further causes the computer to:

 modify said developmental attributes of a plurality of said checkpoints; and
 display said modifications at each of said modified checkpoints.

36. The computer usable medium of claim 34 wherein said developmental attributes include actions performed in said software product development.

37. The computer usable medium of claim 36 wherein by said modifying said actions, the computer program causes the computer to switch said actions to an other of said developmental lines.

38. The computer usable medium of claim 33 wherein the computer program when executed, causes the computer to:
 track developmental lines remote from said display;
 store, tracked data, in association with said display;
and
 communicating the data tracked to be stored.

39. A computer useable medium having stored thereon a computer readable program for tracking, on a computer controlled display, for the building of a program product from a functional implementation stage to a complete integrated program product, wherein the computer readable program when executed on a computer causes the computer to:
 set up a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product;
 set up in each of said plurality of developmental lines, a sequence of checkpoints;
 track each of said developmental lines to determine the reached checkpoints; and
 simultaneously display said plurality of developmental lines and indicate said reached checkpoints.

40. The computer readable medium of claim 39 wherein said computer program when executed further causes the computer to display at each of said checkpoints, a set of attributes for said checkpoint related to the compatibility functions of said checkpoint line.

41. The computer readable medium of claim 40 wherein the computer program when executed further causes the computer to:

 modify said attributes for each of said checkpoints;

and

 display said modifications at each of said checkpoints.

IX. Evidence Appendix

There is no evidence presented.

X. Related Proceedings Appendix

There are no related proceedings.